What Is Claimed Is:

1.   A control unit for a restraint system, which unit is configured such that the control unit (100) fires all connected pyrotechnic firing elements,

wherein the control unit (100) receives via an interface (103) a software element which is configured such that as a function of the software element all the firing circuits (107, 108), and the triggering algorithm for firing all the firing circuits, are configured, and sensor values for a safety module (105) are emulated such that the safety module (105) enables all the firing circuits (107, 108).

2.   The control unit as defined in Claim 1,
wherein the interface (103) is a CAN bus.

3.   The control unit as defined in Claim 1,
wherein the interface (103) is a K-line.

4.   The control unit as defined in any of the foregoing claims,
wherein a processor (101) in the control unit is connected via a bus (104) to the safety module (105) and to at least one sensor module (111, 112) and/or to at least one interface module (113) for the connection of at least one external sensor, the processor (101) emulating the sensor values on the bus (104).

5.   The control unit as defined in Claim 4,
wherein the bus (104) is a serial peripheral interface (SPI) bus, the processor (101) being the master and being configured in that the processor (101) transfers the emulated sensor values via the MISO line.

6.   The control unit as defined in Claim 5,
wherein the MISO line is connected to an I/O port (118) of the processor (101) for transfer of the sensor values.

7.   The control unit as defined in any of the foregoing claims,
wherein a boot loader software program (115) that loads and starts the software element is provided in the processor (101).

8.   The control unit as defined in any of Claims 2 through 7, wherein at least one reset switch (117), which is provided for restarting the at least one sensor module (111, 112) and the safety module (105) as well as the firing circuits (107, 108), is provided.